

Figure 1

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Figure 2C

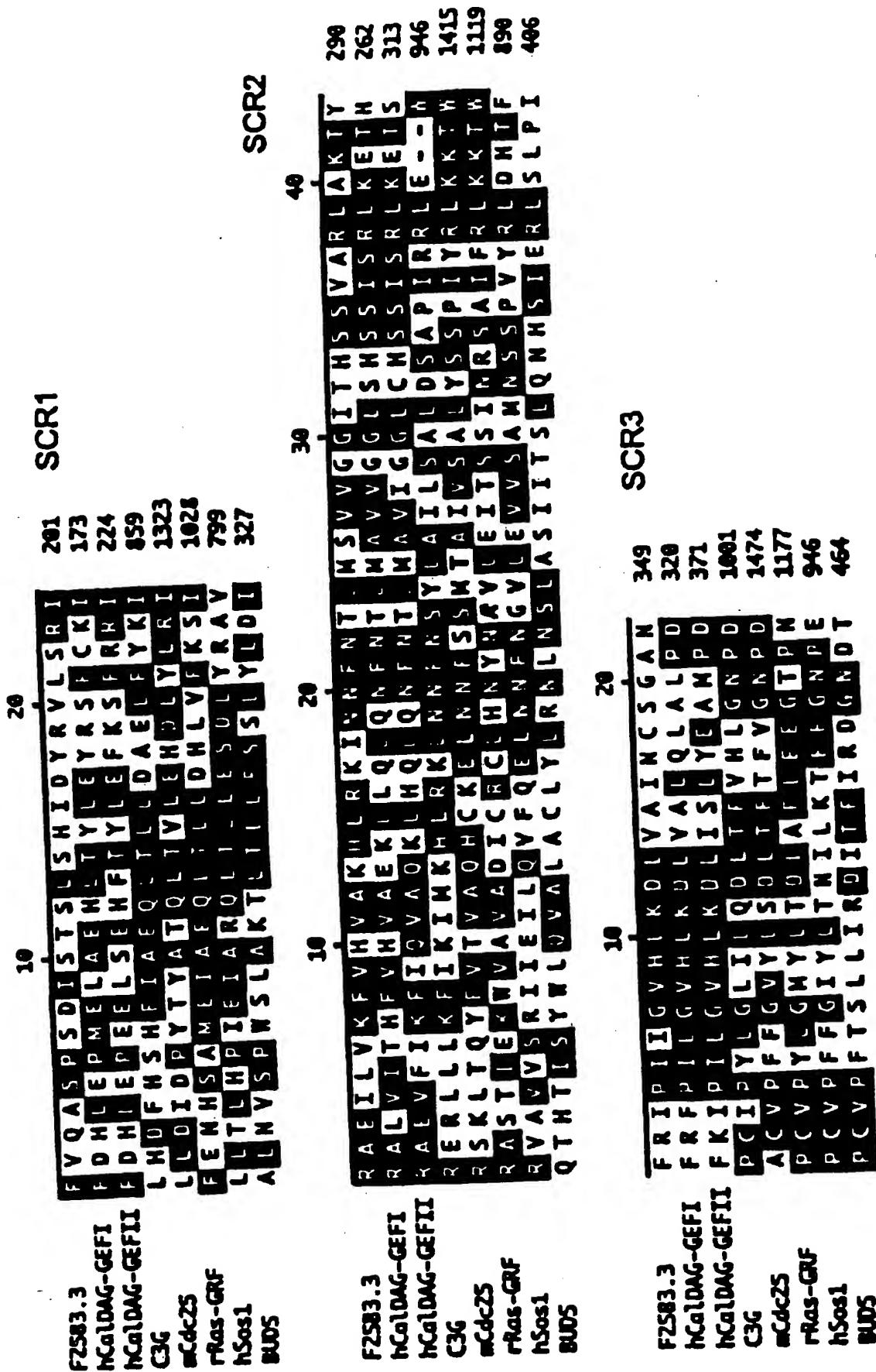


Figure 2A

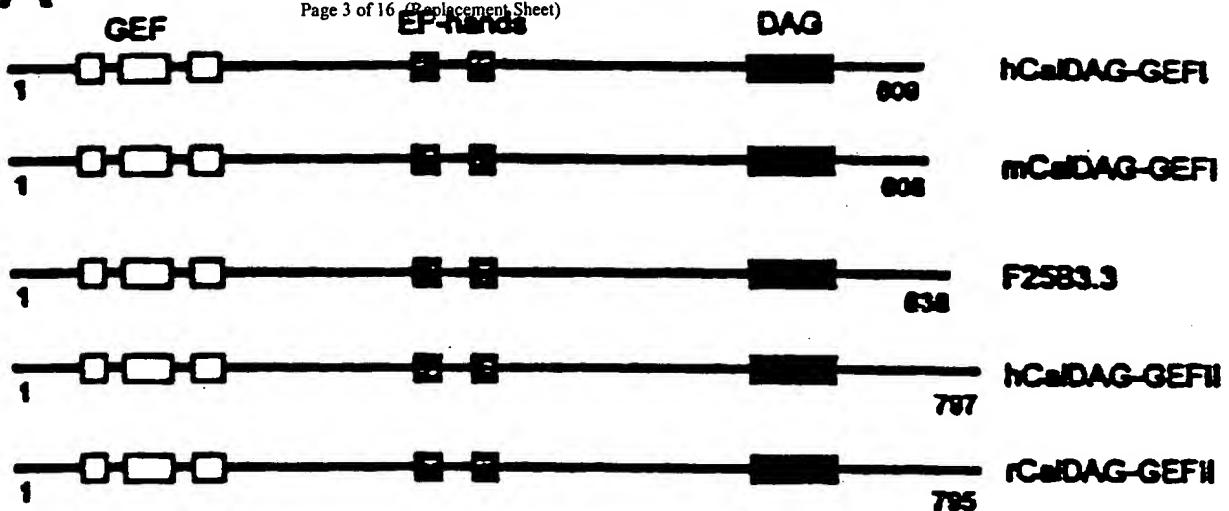


Figure 2B

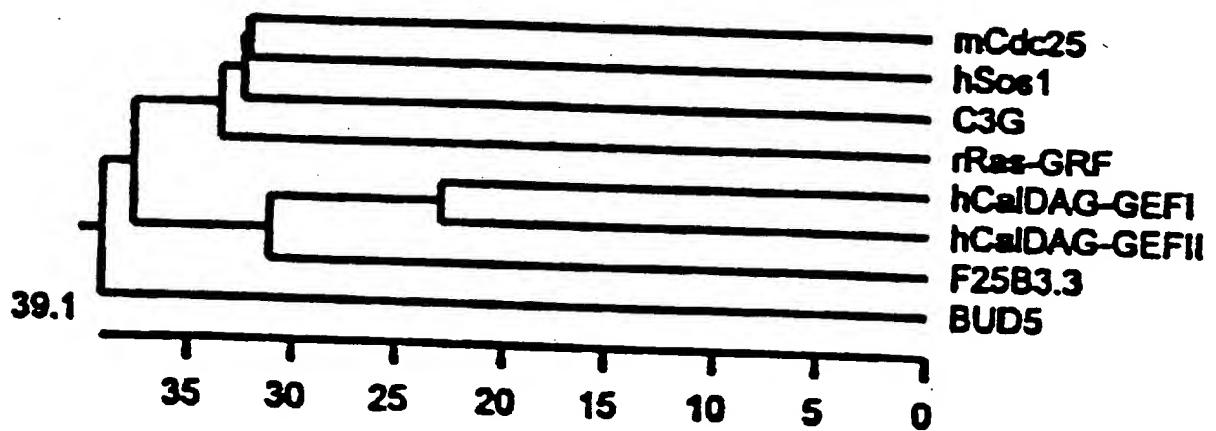


Figure 2D-1

Figure 2D-2

Q A K L H I Y Q Q S R K D N S N S L Q V K T C H L V Y Y H I S A F P A E F D L N P E L A E D I 0 1
Q L A S K L H I Y Q Q S R K D N S N S L Q V K T C H L V Y Y H I S A F P A E F D L N P E L A E D I 200
D N L E P H E L A E H L T Y E Y S F C K I L F Q D Y H S F Y T H G C T Y D N P V L E R F I S L F 200
D N L E P H E L A E H L T Y E Y S F C K I L F Q D Y H S F Y T H G C T Y D N P V L E R F I S L F 300
S N S S I S E L K E T H S N V S P E T I K L H E G L T E L Y T A T C H N Y E R L A A C Y G F R 300
S N S S I S E L K E T H S N V S P E T I K L H E G L T E L Y T A T C H N Y E R L A A C Y G F R 400
R P P V Q A H P D L L S L L T Y S L D Q Y T T E D E L Y Q L S L Q R E P R S S S P T S C T P 400
R P P V Q A H P D L L S L L T Y S L D Q Y T T E D E L Y Q L S L Q R E P R S S S P T S C T P 500
F Q I I E G H F P Y L S A F G D L Q H Q Q C I S E E E M Y S Y F L E S S S V L G G R H G F V H 500
F Q I I E G H F P Y L S A F G D L Q H Q Q C I S E E E M Y S Y F L E S S S V L G G R H G F V H 600
R A Q S V Y S L E C S A P S P S P H H S H R A F S S L P R K P C R R R S R P P E I R E E V Q T Y 600
R A Q S V Y S L E C S A P S P S P H H S H R A F S S L P R K P C R R R S R P P E I R E E V Q T Y 700
R A Q S V Y S L E C S A P S P S P H H S H R A F S S L P R K P C R R R S R P P E I R E E V Q T Y 800
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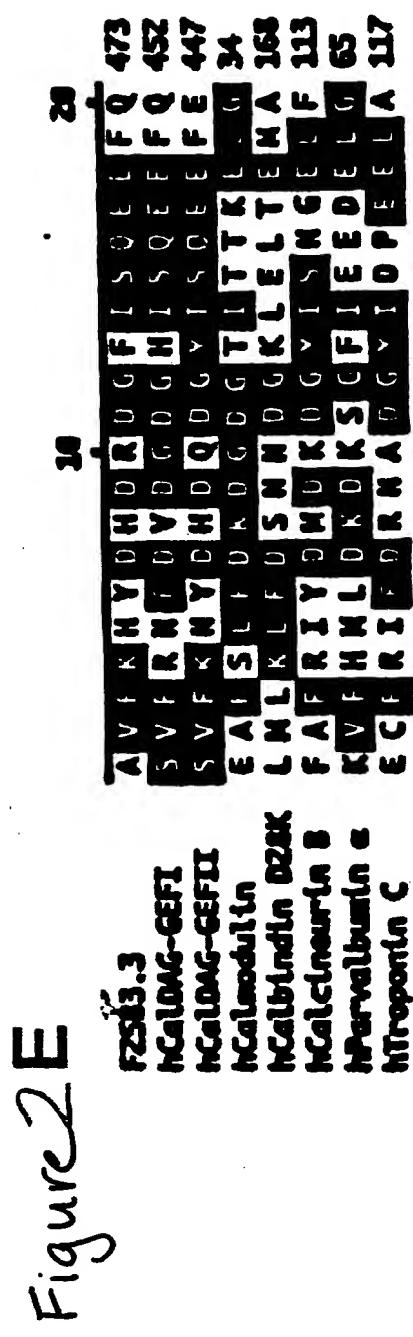
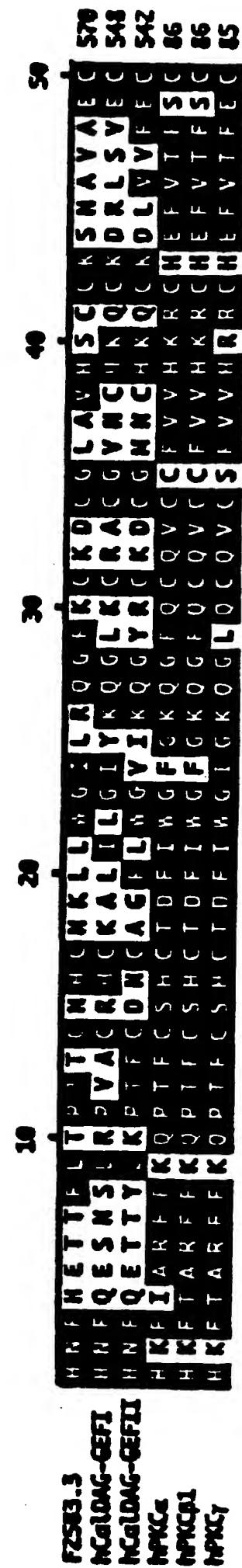


Figure 2F



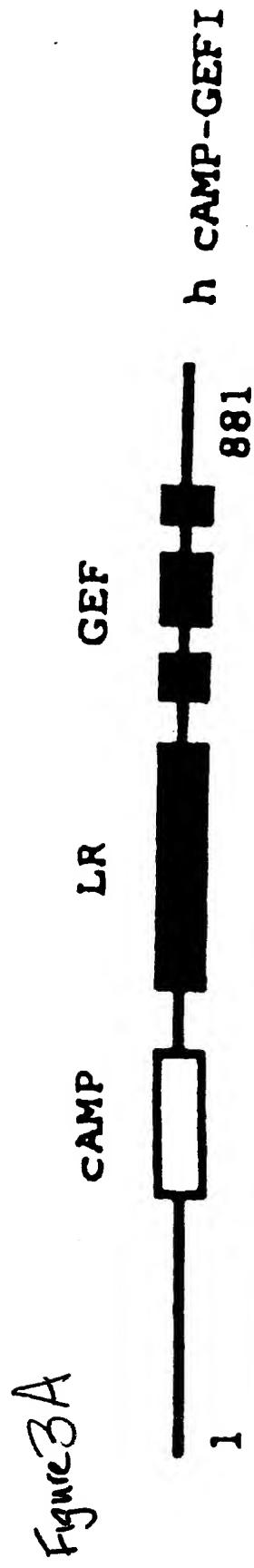


Figure
3B

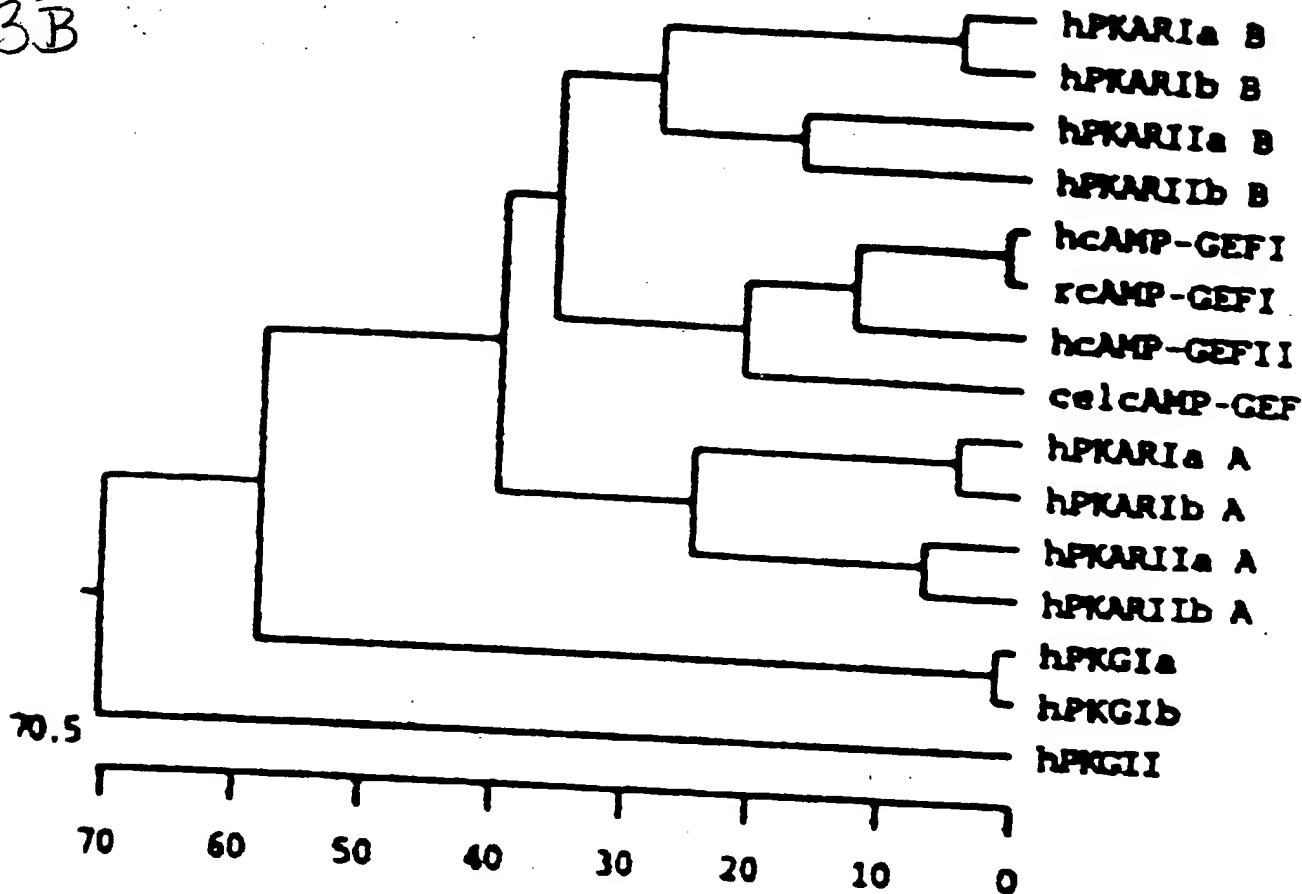


Figure 3C

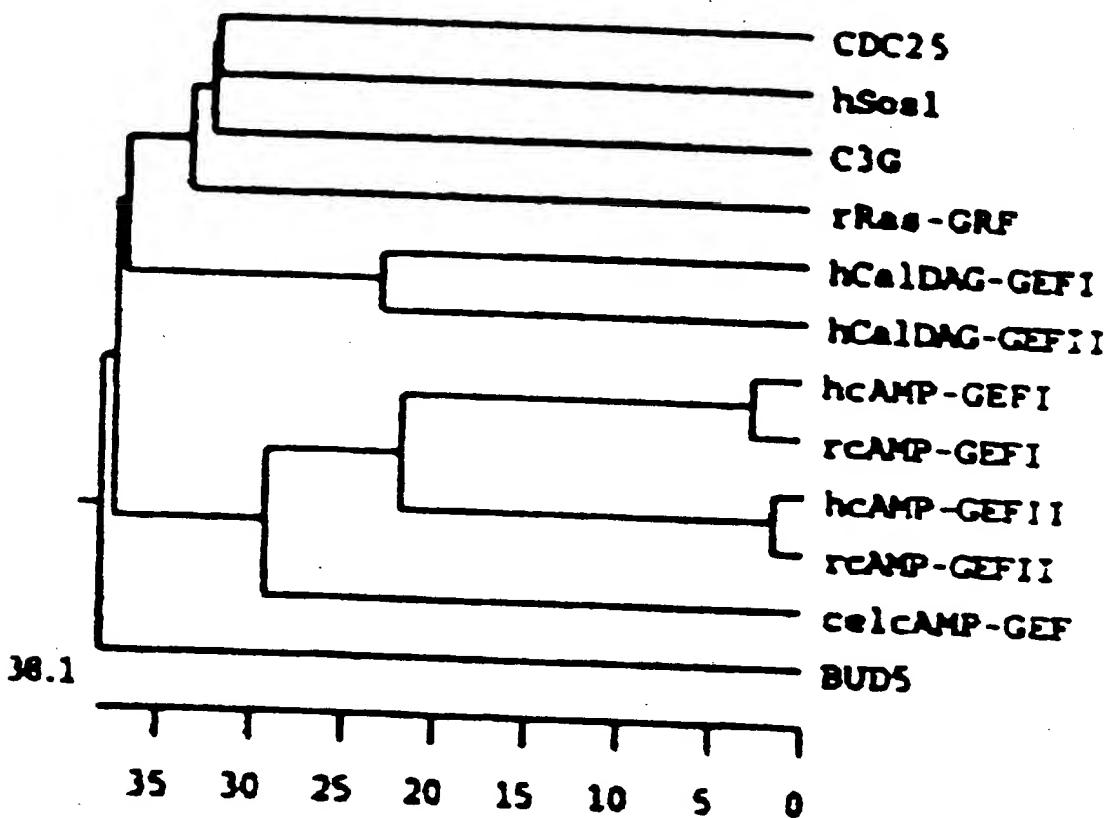


Figure
3D-1

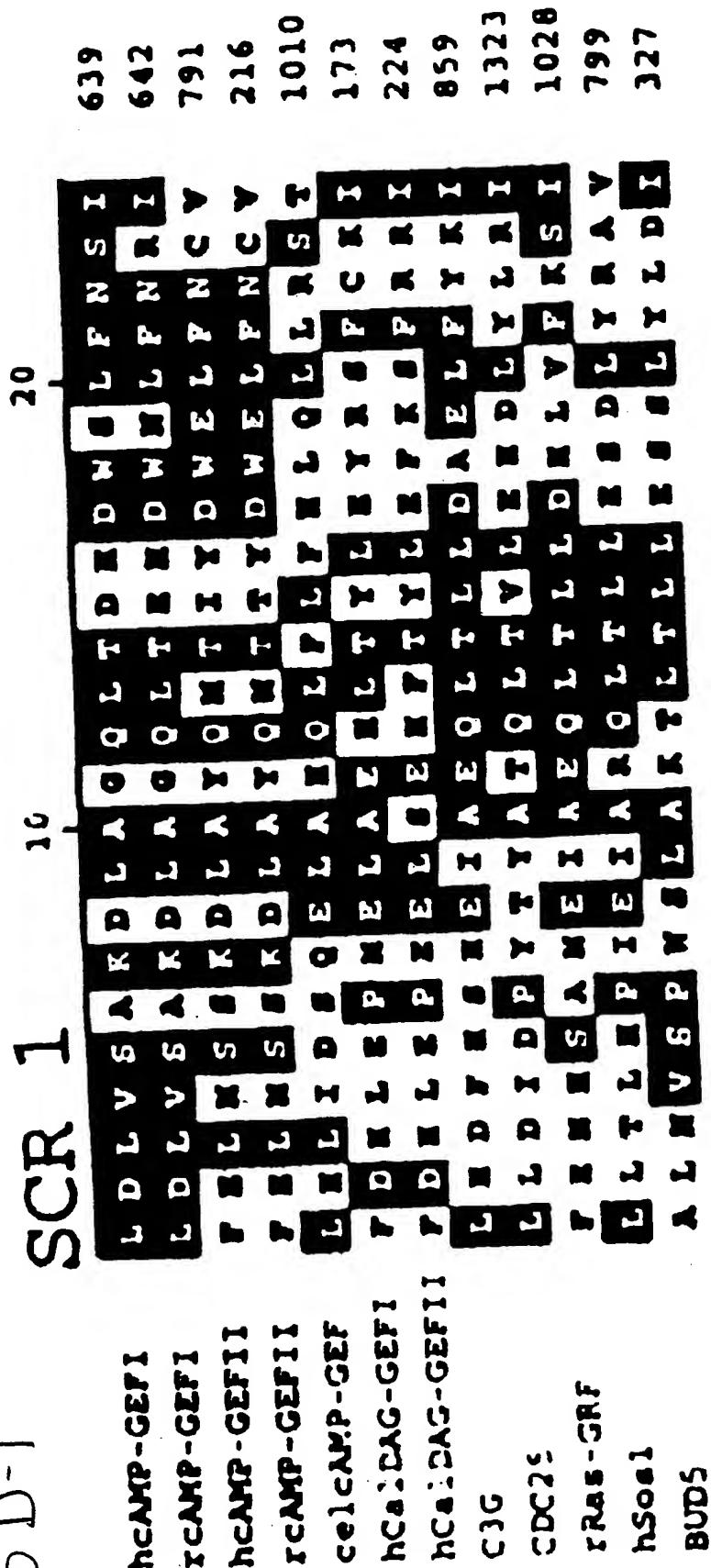


Figure
3D-2

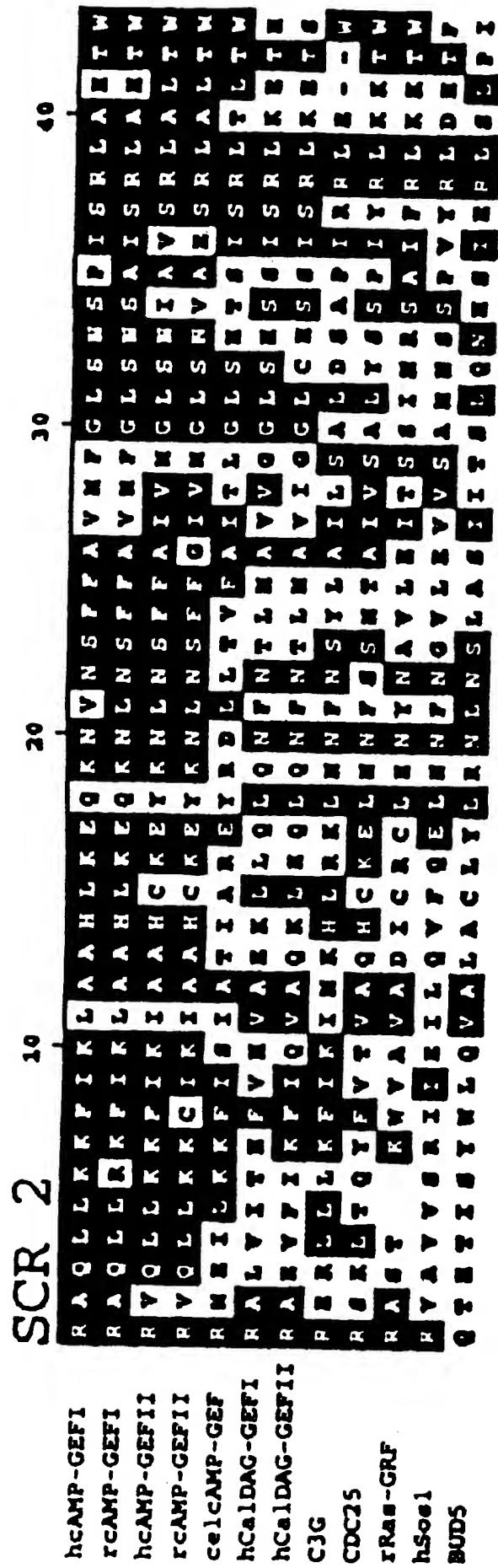
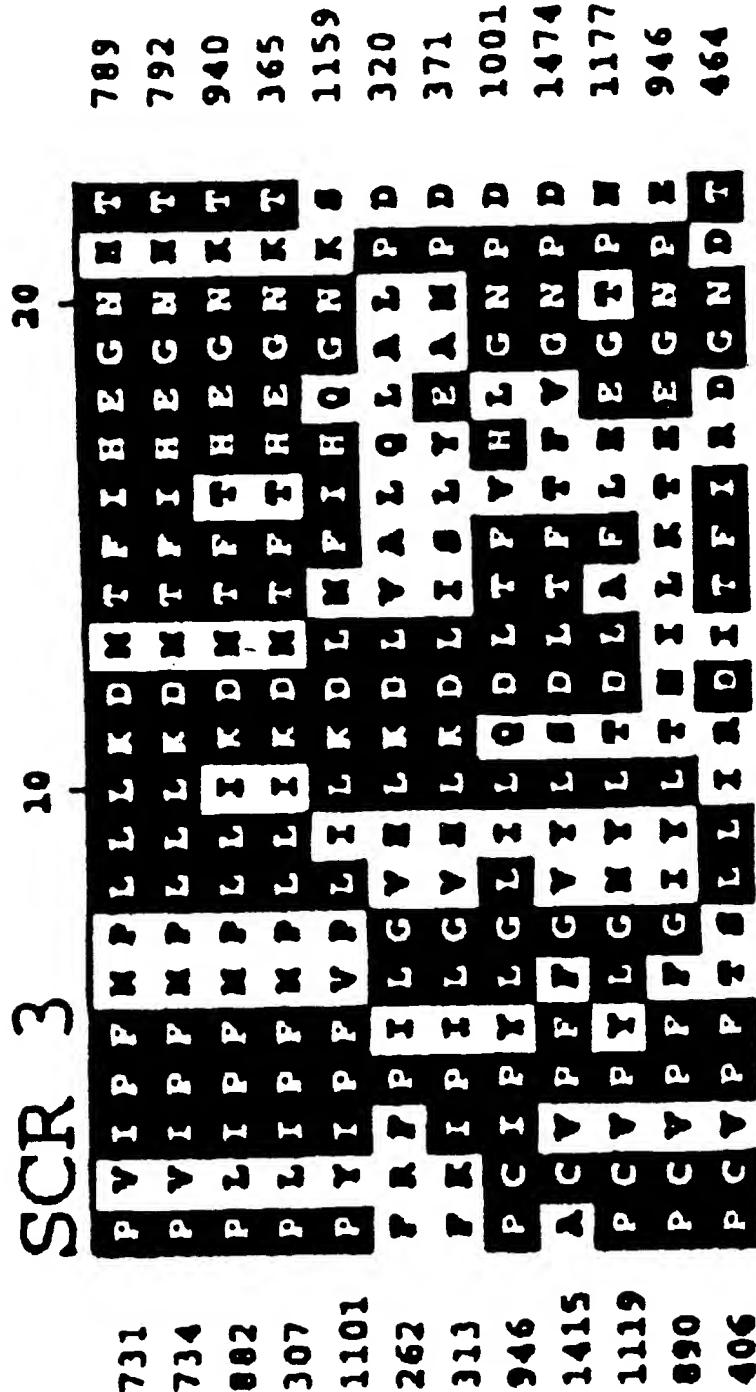


Figure 3 D-3



Title: Genes Integrating Signal Transduction Pathways
Inventor(s): Kawasaki et al.
Serial No. 09/422,999
Atty Docket No. MIT-103
Atty/Agent: Jennifer G. Motoiso
Express Mail Mailing Label No. EV 596440685US
Page 14 of 16 (Replacement Sheet)

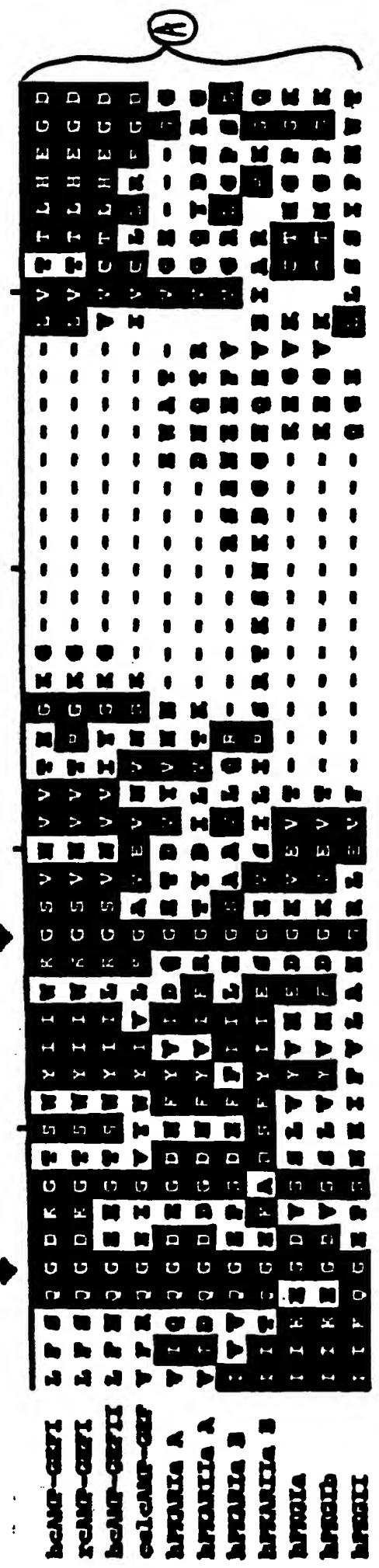


Figure 3E-1

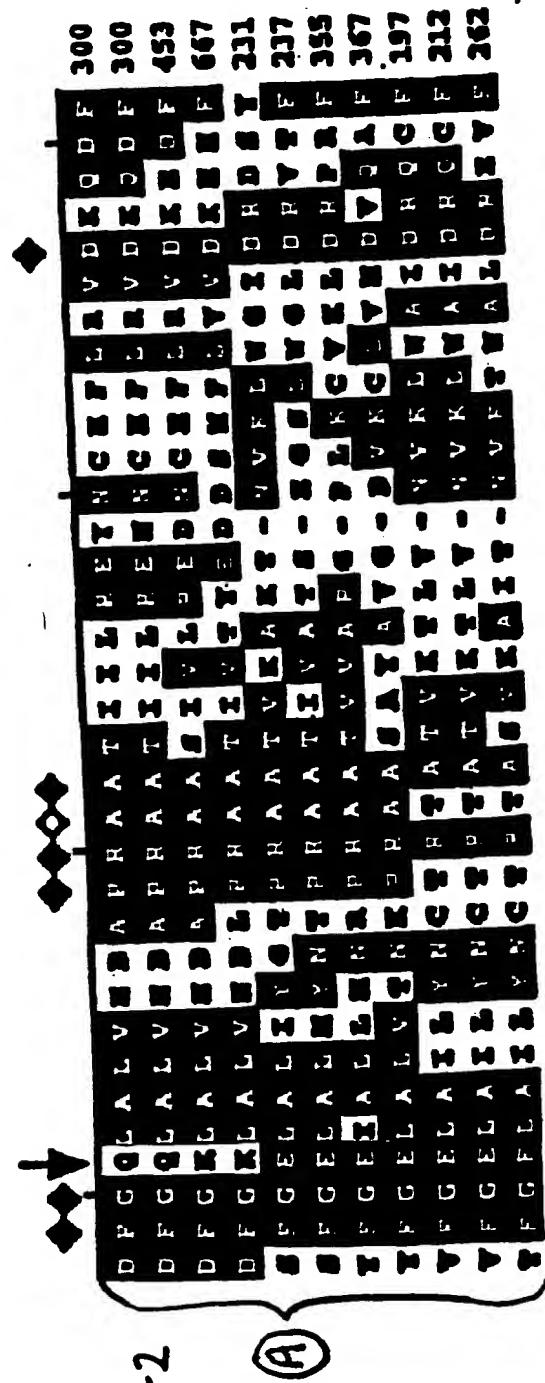


Figure 3E-2

Figure 3 F-1

bcAMP-CERI	MVL	-----	RRRMRPES	-----
bcAMP-CERII	MVA	A A H S S S S A E W I A C L D K R P L E R S S E D V D I X F T R		
bcAMP-CERI			H Q H P S	- C I Q G -
bcAMP-CERII	T A V L A G S	L D V K V S E T S S H Q D A V T I C T L C I G T A P G R S I		
bcAMP-CERI			T P L T H S E E S	L D P S E S L E Q
bcAMP-CERII	P Y G V M E T G S	H D R I P D K E N T P L I E P H V P L R P A N T I T K		
bcAMP-CERI	L V D	G I L A L G L G V N S R S Q Q V V G I C Q V L L D E G A L C H V K N D		
bcAMP-CERII	L V D	N M M Q Q T P C V E S R T Q A V G N W Q V L L E D G V L H H V D Q E		
bcAMP-CERI	S Q R G P D A L L	T V A L R K P P Q Q R T D E E D L I F R E E L L N I K A		
bcAMP-CERII	S O N G P D A M M	R M I L R K P P Q Q R T V D D L E I I Y E E E L L N I K A		
bcAMP-CERI	G S V H V V	T N G K G L V T T L H E G D D F G Q L A L V N D A P R A A T I		
bcAMP-CERII	G S V H V V	I T G K G V V C T T L H E G D D F G K L A L V N D A P R A A S T		
bcAMP-CERI	A S Q G A	- G P S R P P T P G R M R Y T V M S G T P D K I L E L L L E A M		
bcAMP-CERII	V P A G	H R A S H Q G N S Q P Q Q K Y T V M S G T P E K I L E K P L E T I		
bcAMP-CERI	G G S E Q	Q R S T Y V C M X R Q Q I L R L V S Q N V A L Y G S M L H T D P		
bcAMP-CERII	Q G T E Q	E K N D Y A L M N K R R V I R L V L Q W A A M Y G D L L Q E D D		
bcAMP-CERI	S P Q N K	A R N L P V W L P H Q D E P L P G S S C A I Q V G D K V P Y D I		
bcAMP-CERII	A P Q K K	H K V L L Q Q F N T G D E R - A Q K R Q P I R G S D E V L P K V		
bcAMP-CERI	G D A I G L Q	P D A R G V A T S L G L M E R L F V V V P Q E V M E L I P H		
bcAMP-CERII	G E X V V	L K P H D V S V F T T L T I N G R L F A C P R E Q F D S L T P L		
bcAMP-CERI	H Y V L G	P Q Q E L R D V T T A N L E R F M R R F H E L Q Y M V A T E L C L		
bcAMP-CERII	Y H T F G	R H H P K K - T T A N L D L P L R R F H E I Q P W V V T E I C L		
bcAMP-CERI	R L A H T	W E R L P H K V R K L Y S A L E R L L D P S M M H R V Y R L A L		
bcAMP-CERII	R L A L T	W E K L P S K P K E P Y A E P E S L M D P S R N H R A Y R L T V		
bcAMP-CERI	A A R M L H H	C R S H H P V P L S P L R S R V S H L H E D S Q V A R I S T		
bcAMP-CERII	T A R T V	R Y T R S Q - - P P H P - - - - -		

Figure 3F-2

LKEVKAPEKPFPHNLLNQICLCSYQLLLE----- 20
LDNTPREHATIVTRESKELLRLR-----W----- 32
ASTERAVLRAAGRQLQGHLATCPMLIRDRKTYHLRLYRQCCSGRE 92
VPSERKILRACKILRHAISRAEEMIRDRKTYHLKTYRQCCVGTE 240
WAQDQDRAQFTYRPPGPEPE-----PVGTHEN-----EEELAKAVALL 166
EKFQDK-YLFYRFLDDDEEDAPLPTEEEKECDDEELQDTHILL 319
VANLSESVKRELAAVLLPEPHESKAGTVLFSQGDKGTSWYIILK 246
LSHLSTTVKRELAGVLPESMAKGGTVLPHOCCEGTTSWYIILK 399
ILREYHNCFLRVDEQDFHRIIKIDVEAXTMALLEEKGKVVLVLER 326
VLRVEDNCHCFPLRVDEKDQDFHRIILRDVEANTVRLKEDQDVVLVLER 479
GLDSSANDSKETPLSDFPLLTHRVPFMPSAQLCAGALLKHPTHEFA 405
RLEATLNHATDSVLNDPFIKKHCVFMPNTOLCPALVANYHAQPS 559
VATSFLHKLSDLVGRDTRLSHLILREGQMPERRRCERLENGCGNA 485
VSKAFLKEFYVSVDARHIAALKEQOLPELEKIVKQISE-DAX 638
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PEQEGPTVCTVGTFLKSSKDLATQNTIYDWELFNCVHELELI 797
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CSQLSKRVQQLKKPIELAANCKEYKMLNSPPAIVMGLSNIAVS 876
AKLSPPFVIPPFNPPLLKKDNTPIKEGNNTLVENVLIPPERKRNHAR 805
AKLEPPFLIPPFNPPLLKKDNTPTHEGNNTPIDNLVNPPEKRNHIAN 956
CSEQSLSTRSPASTWAYVQQQLKVIDNQRELRSRLSRELEP 881
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